MDNR Appendix F - Section Specific Comment 125:Section 4.3.3,

Comment:

Toxicity Assessment, page 7 - Toxicity information was provided in the published BRA's toxicity assessment for the radionuclides and chemicals of concern. This information was rechecked against current entries in the IRIS database or risk calculator web sites maintained by EPA. Please provide the result of this evaluation in table format.

Discussion:

The final column of Table 4-2 presents the end result of using updated information on the process used to select chemicals of concern for evaluation. Differences between the COCs selected for evaluation in the BRA and those selected for this draft of Appendix F are noted in the final column of that table.

Additional information on toxicity has been incorporated in appropriate tables in the revised risk assessment. Tables 4-3, 4-4, and 4-5 present the radiological slope factors, oral slope factors, inhalation risk, chronic oral reference doses and chronic inhalation reference concentrations used by EPA to calculate Soil Preliminary Remediation Goals (PRGs) and Soil Screening Levels (SSLs).

Proposed Text Change:

Section 4.2.1.2 has been revised and now reads:

"4.2.1.2 Chemicals of Concern

"The BRA also performed a toxicity screen of the chemicals that were reported at the Site. This toxicity screen has been updated to account for changes that have occurred since publication of the BRA. Table 4-2 presents the concentrations used in the screening evaluation and the results.

EPA FEEDBACK:

EPA accepts this response and the proposed text change.

Table 4-2 Summary of Chemical Toxicity Screen for Surface Soil

Analyte	Risk- or HI-Based Industrial Screening Values [a] (mg/kg)	Maximum Soil Concentrations [b]		Selection/Screening of COCs in Soils [c]		Screening Result Changed from Baseline?
		Area 1 (mg/kg)	Area 2 + Boundary (mg/kg)	Area 1 0-1 ft	Area 2 + Boundary 0-1 ft	
Inorganic Chemicals						
Arsenic	$1.60x10^{00}$	220	35	**YES**	**YES**	no
Beryllium	$2.00x10^{03}$	3.3	2.2 [f]	no	no	no

Cadmium	$8.00x10^{02}$	7.9	6.3 [f]	no	no	no
Chromium (VI)	$5.60x10^{00}$	31	49 [f]	**YES**	**YES**	**Added**
Copper	$4.10x10^{04}$	2,300	360	no	no	no
Lead	$8.00x10^{02}$	320	2,200	no	**YES**	no
Mercury	$3.40x10^{01}$	0.17	0.27	no	no	no
Nickel	$2.00x10^{04}$	3,600	680	no	no	no
Selenium	$5.10x10^{03}$	250	38	no	no	no
Thallium	$1.40x10^{01}$ [d]	1.2	nr [e]	no	no	no
Uranium	$3.10x10^{03}$	437.5	875	no	no	**Deleted**
Zinc	$3.10x10^{05}$	120	400 [f]	no	no	no
Organic Chemicals						
Acetone	$6.30x10^{05}$	0.034	0.038	no	no	no
Bis(2-ethylhexyl) phthalate	$1.20x10^{02}$	7.8	77	no	no	no
Di-n-octylphthalate	$1.80x10^{03}$ [d]	3	12	no	no	no
1,4-Dichlorobenzene	$1.20x10^{01}$	0.042	0.0065	no	no	no
Fluoranthene	$2.20x10^{04}$	nr	8.5	no	no	no
Xylenes	$2.70x10^{03}$	0.037	0.012	no	no	no
Pesticides/PCBs						
Aldrin	$1.00x10^{-01}$	nr	0.0017	no	no	no
Aroclor-1254	$7.40x10^{-01}$	1.1	1.6	**YES**	**YES**	no
4,4'-DDD	$7.20x10^{00}$ [d]	nr	0.0076	no	no	no
4,4'-DDT	$7.00x10^{00}$	nr	0.0094	no	no	no

[a] Unless otherwise noted, values are from http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/, February 21, 2011. When carcinogenic (risk) and non-carcinogenic (hazard) based screening levels were given for a constituent, the lower of the two was selected.

[b] From Table A.2-1 of the BRA (Auxier 2000)

[c] "YES" signifies that the analyte was selected for quantitative risk evaluation, "no" signifies that analyte was not selected for quantitative risk evaluation.

[d] Value from BRA, no updated information identified.

[e] nr = not reported

[f] Measured on the former Ford property (current Buffer Zone and Crossroad Lot 2A2 properties) before surface grading were performed by the adjacent property owner.

Chromium VI has been added to the list of COCs because its maximum reported concentration exceeds the current published screening level of 5.6 mg/kg. [1] The current screening level published for elemental uranium has increased since publication of the BRA. The maximum concentration of elemental uranium is now below the current EPA Regional Screening Level of 3,100 mg/kg and elemental uranium has been removed from non-carcinogenic evaluations (individual isotopes of uranium remain as COCs because they are radiocarcinogens)."

[1] http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/